

for its reception. De Blainville adopted the genus, modifying the character as follows:—

“Animals polypiform, sessile, not retractile, provided with eight pinnated tentacula, arranged quincuncially on one side only of the posterior half of a free, regular, quadrangular and much elongated rachis.” (Actinologie, p. 516.)

This genus appears well-founded, and the species will accordingly stand as *Pavonaria quadrangularis* (sp.), Pallas.

In Loch Fine Mr. MacAndrew dredged a fine specimen of the remarkable and rare zoophyte known to British naturalists as “*Zoanthus Couchii*.” It has not hitherto, as far as I am aware, been noticed on the Scottish coasts.

All the above-mentioned animals were exhibited to the Natural History Section at York. It is very desirable, since most of the naturalists engaged in the investigation of the indigenous fauna and flora are members of the British Association, that from year to year new and rare forms of British animals and plants should be brought forward at the annual meetings of that body, and so be rendered familiar to many who might not otherwise have an opportunity of examining them. The chief interest of the Section will always depend on the meeting of the practical investigators of the zoology and botany of the British Islands, and of the statistics of natural history, with those naturalists whose attention is directed to the philosophy of the science and to the investigation of structural and physiological questions. This has been the character of the Section during the last two meetings, and promises happily to be permanent and to be the means of elevating the reputation of this department of British science among our continental brethren, who a few years ago were not much inclined to admit the probability of our going ahead in the higher branches of biological science. The more suggestive the character of the meetings of Section D. is rendered, and the less there is of frivolous disputes as to who first named this species or who named that, without reference to structure, habits, law and locality, the better.

EXPLANATION OF PLATE XI. UPPER FIGURES.

1. *Emarginula crassa*.
2. *Eulima MacAndrei*.
3. *Pleurotoma teres*.

LIII.—*Descriptions of some new Species of Butterflies in the Collection of the British Museum.* By EDWARD DOUBLEDAY, Esq., F.L.S.

GENUS PAPILIO.

P. Photinus. Alis omnibus nigris, cæruleo-micantibus, posticis dentatis, serie duplici macularum chermesinarum, ciliis omnibus albo-maculatis. Expans. alar. $3\frac{1}{2}$ unc.

Above.—Anterior wings black, the apex fuscous, the disc and

inner margin with blue and green reflections. Posterior wings dentate, the third tooth prolonged into a short tail, the whole surface with brilliant blue and green reflections. Beyond the discoidal cell is a series of six crimson, rather rounded spots, the first, second and fifth smaller than the others, followed by a second series of markings of the same colour, of which the first is quadrate, the four others lunulate. Cilia of all the wings spotted with white.

Below.—Anterior wings olivaceous, the disc fuscous. Posterior wings greenish olive, with the crimson markings nearly as above, but slightly bordered with black, and in addition two crimson streaks at the anal angle bounding a fuscous spot.

Head black, palpi crimson, thorax and abdomen black, the sides below spotted with red.

Female fuscous, the markings on the posterior wings larger and paler, a long dull red spot at the anal angle.

From the west coast of America, probably Mexico.

P. Pyrochles. Alis omnibus nigris anticis olivaceo-micantibus, macula trigona glauca, posticis maculis tribus coccineis, splendide opalescentibus. Exp. alar. $3\frac{1}{4}$ unc.

Above.—Anterior wings black, glossed with shining olive, marked on the inner margin near the base with a trigonate glaucous spot not quite attaining the discoidal cell. Posterior wings deep black, with three brilliantly opalescent crimson spots between the branches of the median nervures, of which the outer is rounded, the others much larger and oval. All the cilia spotted with white.

Below.—Fuscous, anterior wings with a few glaucous scales between the second and third branches of the median nervure. Posterior wings with the same marking as above, but of a pinkish white crimson posteriorly, and between these and the anal a large pale and a small deeper red spot.

Head black, palpi crimson, thorax and abdomen black, the sides below spotted with crimson.

From Sta Fé de Bogotá.

P. Cymochles. Alis anticis fuscis, basi nigris macula magna glauca in qua maculæ duæ albæ; posticis nigris, macula palmata coccinea perpulchre opalescente. Exp. alar. vix 3 unc.

Anterior wings fuscous, the base and inner margin black, marked with a large trigonate glaucous spot extending to the discoidal cell, marked at its upper angle with a dull white spot divided into two by the second branch of the median nervure. Posterior wings black, brilliantly shaded with blue along the abdominal fold, marked on the disc with a palmate crimson opalescent spot divided into six portions by the nervures, one small within

the cell, four others resting on the branches of the median and on the radial nervure, the outer of these small, the others successively larger, except the last, which is almost linear. Cilia all spotted with white.

Head black, palpi and occiput red. Thorax black, with a red collar below spotted with red. Abdomen fuscous, two spots on each side near the base, and margin of last segment below red.

From Trinidad.

P. Mezentius. Alis omnibus nigris fascia communi maculari albida, posticis dentatis, caudatis, maculis discoidalibus, lunulisque marginalibus rufis. Exp. alar. 4 unc.

Above.—Anterior wings black, with a narrow macular whitish band commencing indistinctly upon the costa, traversing these wings considerably *beyond* the discoidal cell, and terminating on the disc of the posterior wings, where the last spot is divided into three parts by the disco-cellular and the last branch of the median nervure. Posterior wings black, sprinkled beyond the middle with a few bluish scales, deeply dentate, the third tooth from the anal angle prolonged into a long spatulate tail, marked, in addition to the white fascia, with three somewhat rose-coloured spots placed transversely between the abdominal margin and the termination of the macular band, which is here slightly tinted with rose-colour. Beyond these are three lunules of the same colour, one above the anal angle, the others close to the margin, between the first, second and third branches of the median nervure, succeeded by two sigmoid red spots, and near the anal angle by a whitish one. Anal angle itself red. Cilia white, except at the extremity of the dentations.

Below paler than above, and in addition to the markings of the upper surface there is a narrow white line near the outer margin of the anterior wings, extending from the fourth branch of the median nervure to the anal angle, and on the posterior wings an indistinct macular flexuous white band preceding the marginal series of lunules and spots.

Head black; palpi yellow; thorax black, spotted below with yellowish; abdomen fuscous, with a yellowish lateral line.

From the west coast of America (probably of New Granada or the Ecuador). Closely allied to *P. Hectorides*, but may be easily known from it as the macular white band begins nearer the apex of the anterior wings, crosses the wing at *some distance beyond* the discoidal cell, and is continued nearly in a direct line to the disc of the posterior wings, only a slight portion being within the discoidal cell.

P. Victorinus. Alis omnibus supra nigro-olivaceis, apice fuscis, serie duplici macularum flavarum, subtus, maculis posticarum rufis. Exp. alar. 5 unc.

Anterior wings above black, tinged with olive, the posterior margin with a series of eight rounded yellow spots, the first indistinct, the last double, preceded by a curved series of yellow spots, interrupted opposite the discoidal cell, composed of a longitudinal streak on the costa, three rounded spots between the branches of the median nervure followed by a lunular, and on the inner margin by an elongate one, all of a yellowish colour.

Posterior wings dentate olive-green, with a series of seven rounded spots beyond the discoidal cell, followed near the margin by a series of six lunules, and at the outer a round spot all yellow; cilia spotted with white.

Below.—All the wings, the anterior with the disc fuscous, the outer series of spots vanishing towards the apex, the inner series more marked than above, with two additional spots opposite the discoidal cell, in which is a large yellow spot divided by a longitudinal black line.

Posterior wings with the spots and lunules red, the inner series smaller than above and edged with black.

Head black, orbits behind and base of palpi yellow. Thorax black, with a yellow spot on each side above anteriorly. Abdomen fuscous.

From the west coast of America.

This species is closely allied to *P. Cleotas*, *Grayi*, and *Phaëton*, Boisd.

GENUS EUTERPE.

Eut. Hylonome. Alis omnibus nigris, anticis supra fascia transversa alba, posticis subtus pallide roseis nigro striatis. Exp. alar. 1 unc. 9 lin.

Above.—Smoky black, anterior wings with a transverse fascia near the middle divided by the nervures, not reaching either the costa or inner margin.

Below.—The anterior wings are marked as above, the posterior are more coloured at base, paler towards the apex, the nervures and a vitta between each two nervures black, the black predominating on the margin and just beyond the discoidal cell.

Head, thorax and abdomen black.

From Sta Fé de Bogotá.

GENUS LEPTALIS.

Lept. Cyra. Alis omnibus nigris, anticis vitta longitudinali, fasciaque transversa flava, posticis vitta discoidali flava. Exp. alar. 1½ unc.

Above.—Anterior wings black, with a curved longitudinal pale yellow vitta beginning at the base and terminating not far from

the anal angle, and a rather broad transverse band of the same colour beginning on the costa beyond the discoidal cell and terminating near the middle of the outer margin. Posterior wings black, the disc traversed by a broad pale yellow vitta which extends from the base nearly to the outer angle; the costa is of a neutral tint, furnished in the males with a long tuft of hair as in the *Heliconians*.

Below.—All the wings black, the markings as above, with the addition of a marginal series of small white spots, preceded by a narrow ferruginous line broken on the anterior wings. The base of the posterior wings has a yellow vitta on the costa.

Head black; thorax above ferruginous, below black; abdomen above black, below yellow.

Lept. Eunoë. Alis anticis falcatis nigro-fuscis, vittis duabus basilibus longitudinalibus maculaque bifida aurantiacis, fasciis duabus macularibus obliquis apiceque flavis, posticis aurantiacis fimbria lata nigro-fusca maculis tribus apicalibus flavis. Exp. alar. 3 unc.

Anterior wings falcate, the base with a longitudinal orange vitta in the cell and a narrower one on the inner margin, at the extremity of which is a spot bifid anteriorly, of the same colour. Beyond there is a transverse yellow macular band, composed of five spots surrounding a square black patch placed on the discocellular nervure and of a large oval spot beyond. This band is followed by another, composed of a spot on the costa divided into three parts by the nervures, and of two approximating oval ones beneath it. The apex itself is yellow with the nervures fuscous. The outer margin is tinged with brown. Posterior wings large, orange, with a broad fuscous fimbria shading to brown on the margin itself, and marked at the apex with three yellow spots.

Below.—Anterior wings nearly as above but paler, the two vittæ and the orange spot confounded together; the apex with some small white clouds. Posterior wings brown, the disc clouded with yellow, the posterior margin, especially towards the apex, freckled or clouded with white.

Head and thorax grayish; abdomen fuscous above, beneath yellowish.

From Mexico. Collected by M. Th. Hartweg.

Lept. Praxinoë. Alis anticis falcatis fuscis, vittis tribus basalibus longitudinalibus aurantiacis, fascia obliqua maculari aurantiaca alteraque flava, posticis umbrino, nigro, aurantiacisque vittatis. Exp. alar. 3 unc.

Anterior wings falcate, fuscous, paler towards the outer margin; the base with three longitudinal orange vittæ, one on the costa, one on the inner margin, the intermediate one extending along both sides of the median nervure a little beyond its first branch,

and occupying a large portion of the space between the first and second branches nearly to the anal angle. Beyond the discoidal cell is an oblique fascia composed of a long orange spot divided by the nervures, preceded by a quadrate and followed by an oblong spot, partly orange, partly yellow. Between this and the apex is a second macular band composed of a quadrate spot on the costa, two large oval ones and a small rounded one near the outer margin. Posterior wings elongate-oval, the costa and posterior margins brown, the disc orange, bordered above and below by a black vitta; these vittæ unite at the apex so as to inclose the orange entirely. Base of the wing with a small yellow dash.

Below.—The anterior wings are marked as above, but are broadly umber-coloured towards the apex, where there are a few white freckles. The posterior wings are umber-coloured, with an imperfect yellow vitta below the cell, followed by some dark clouds; apex with indistinct fuscous and yellow clouds and irregular white freckles.

Head black; antennæ pale; thorax and abdomen above black.

From Mexico. Collected by M. Th. Hartweg.

Lept. Medora. Alis omnibus nigris, anticis emarginatis, fascia transversa, maculis duabus apicalibus, alteraque marginis interioris flavis, posticis disco flavo. Exp. alar. $2\frac{1}{4}$ unc.

Above.—Anterior wings slightly emarginate near the anal angle, black with a transverse yellow band beyond the discoidal cell, commencing on the costa and extending nearly to the anal angle, between which and the apex are two rather rounded yellow spots placed transversely, the anterior the smaller, and on the inner margin, beyond the middle, a short dash of the same colour. Posterior wings broad with the disc yellow, the abdominal and outer margins broadly black; the costa of a satiny ash-colour, marked with a large chalky-white spot.

Below.—All the wings yellow, with a large brown spot near the middle of the costa, and a transverse band of the same colour extending from the costa to the outer margin; the inner margin broadly satiny-ash with a large chalky-white spot, corresponding to the markings on the costa of the posterior wings above. Posterior wings yellow, with a large irregular brown patch beyond the middle, a smaller one of the same colour near the outer angle, and an indistinct narrow brown band extending from the abdominal margin near the anal angle towards the middle of the wing.

Head gray; thorax and abdomen above black, beneath gray.

From Sta Fé de Bogotá.

This species, with every other character of the true *Leptalides*, has apparently the discoidal cell of the anterior wings open.

GENUS PIERIS.

Pi. Marana. Alis omnibus supra albis, marginibus late nigris, subtus nigro-brunneis anticis fascia obliqua, margine interiori late albis, posticis vittis duabus latis albis, duabusque angustis rufis. Exp. alar. 2 unc.

Above.—Male with the anterior wings white, the outer margin with a broad dentate black border, the costa narrowly black; posterior wings white, with a black border of nearly uniform width, not distinctly defined.

Below.—The anterior wings fuscous, with a large white patch occupying nearly the whole of the inner margin and extending into the cell. Immediately beyond the cell is an oblique white band commencing close to the costa and terminating in a point near the middle of the outer margin. Posterior wings fuscous, the base occupied by a broad white band; a similar band commences on the inner margin about the middle and terminates in a point without reaching the outer angle. This band is preceded by a ferruginous streak extending from the inner margin across the discoidal cell, and on the costa at the base is a streak of the same colour.

Female above fuscous, the markings nearly as on the lower surface of the male, but the red streaks are wanting, and the black of the outer margin extends more along the inner margin of the anterior wings, and the white bands of the posterior are rather narrower. The under surface resembles the upper, but is rather paler, and has the same red streaks as in the male, with the addition of a red cloud at the inner and outer angles.

Head, thorax and abdomen above black, below whitish.

From the west coast of America, probably Guayaquil. Closely allied to *P. Amathonte*, but much smaller.

Pi. Chione. Alis omnibus supra margaritaceo-albis, anticarum apice fusco, subtus anticis margaritaceo-albis, posticis flavescentibus, omnibus margine exteriori flavo corticinoque vario.

Above of a beautiful pearly-white, the apex of the anterior wings narrowly fuscous, the apex of the posterior with two fuscous spots.

Below.—The anterior wings are pearly-white, the base and costa slightly tinted with yellow, the outer margin varied with yellow light ground and pearl-coloured clouds. Posterior wings very pale yellow, with a black streak on the disco-cellular nervure, the margin broadly clouded with the same colour as that of the anterior wings, the brown extending nearly to the cell.

Head, thorax and abdomen white.

From Sierra Leone. Closely allied to *P. Pharis*.